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**Título:** Study of phase transition in (Pb,Ba)TiO3 thin films
**Resumo:** Dielectric and Raman scattering experiments were performed on polycrystalline Pb1-xBaxTiO3 thin films (x = 0.40, and 0.60) as a function of temperature. The dielectric study on single phase compositions revealed that a diffuse-type phase transition occurred upon transformation of the cubic paraelectric to the tetragonal ferroelectric phase in all thin films. Diffusivity was found to increase with increasing Barium contents in the composition range under study. In addition, the temperature dependence of Raman scattering spectra was investigated through the ferroelectric phase transition. Raman modes persisted above the tetragonal to cubic phase transition temperature, although all optical modes should be Raman inactive. The origin of these modes was interpreted as a breakdown of the local cubic symmetry by chemical disorder. The lack of a well-defined transition temperature and the presence of broad bands in some temperature intervals above the paraferroelectric phase transition temperature suggest a diffuse-type phase transition.